

AMENDMENT UNDER 37 CFR § 1.111  
Appln. No.: 09/910,037  
Attorney Docket No.: Q65151

**REMARKS**

Claims 2-12 are all the claims pending in the application. Various non-narrowing claim amendments have been made to conform the claims more closely to U.S. practice. In addition, claim 1 has been canceled, without prejudice or disclaimer. Claim 2 has been rewritten in independent form, as has claim 5. Claims 3 and 4 have been rewritten to depend from now-independent claim 2, and claims 11 and 12 have been rewritten so as to depend from now-independent claim 5.

***Claim Rejection 35 U.S.C. § 103***

Claims 2 and 12 stand rejected as allegedly unpatentable over Sinberg in view of Steffes et al. (Electronic Design article, 19 April 1999).

Applicant respectfully requests the Examiner to reconsider and to withdraw the rejection of claim 2, because the combined references teach away from the claimed subject matter, as Applicant will now explain. Claim 2, as now amended, requires that:

1. the transforming device has a transformation ratio which is higher than 1:2.

In contrast, Steffes teaches there are negative trade offs to using high turn ratios, such as greater than 2. For example, Steffes lists the disadvantages and limitations corresponding to how high the turns ratio can go: “a high turns ratio in transformers can limit bandwidth and be more prone to distortion; a high step-up ratio going out onto the line for the driver will mean a high step-down for the receive signal...this can start to impact noise and hence, reach [noise].” More notably, Steffes teaches from his analysis that “turns ratios up to four can be considered, **but most systems work best at two or lower.**” (Electronic Design article, 19 April 1999, pg. 48, col. 2).

Not only do the combined references teach away from the invention, but regarding an output amplifier with an optimum transformer turns ratio, claim 2 of the invention is contrary to the teaching of Steffes. Although Steffes uses various winding ratios in his analysis, Steffes does

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not teach the invention but concludes that a turns ratio at 2 or lower is best. Applicant's invention goes against the grain of what Steffes proposes from his analysis. Indeed, a prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540 (Fed. Cir. 1983). Therefore, the combined references as a whole teach away from the limitation in claim 2. The Examiner must show that the prior art references, when combined, teach or suggest all of the claim limitations. See MPEP § 2143. An artisan of ordinary skill would not have combined the applied references in the manner suggested by the Examiner to produce the subject matter of claim 2, and therefore Applicant respectfully requests that the Examiner withdraw this rejection of independent claim 2 and to find that the claim and its dependent claims 3, 4, 11, and 12 patentably distinguish over the prior art.

***Allowable Subject Matter***

The Examiner objected to claims 5-10 but indicated that they would be allowable if rewritten in independent form including all limitations of the base claim and intervening claims. Claims 5-10 have been so rewritten, and thus Applicant respectfully requests of the Examiner their immediate allowance.

***Conclusion and request for telephone interview***

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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Kelly G. Hyndman  
Registration No. 39,234

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

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